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Highlights

A Short History of the NIH


How NIH grew from a one-room laboratory to become the largest biomedical research agency in the world.

*"Hurry up experiments...
Work—Work—Work."*

Working Out the Code


Nirenberg's method of testing synthetic RNA in a cell-free system was a key technical innovation. Once this technique for decoding the relationship of mRNA to amino acids was publicly announced in 1961, however, there was much more to learn. First, scientists had to determine the exact combinations of nucleotide bases (codons) that specify each amino acid on a protein chain. Second, they had to sequence the order of the bases in the codons to complete the understanding of the genetic code.

For the experiment to work, Nirenberg needed some help from his NIH colleagues in several areas.




Robert G. Martin joined the de-coding race at NIH

Robert Martin of the National Institute of Arthritis and Metabolic Diseases (NIAMD) joined Nirenberg in his quest to decipher the genetic code. He helped to obtain special synthesized RNA with random combinations of bases.




Drs. Maxine Singer and Leon Heppel provided Nirenberg with synthetic RNAs of defined sequence.


More than 20 other scientists and lab technicians helped Nirenberg; they included Philip Leder, C. Thomas Caskey, Merton Bernefeld, and others.



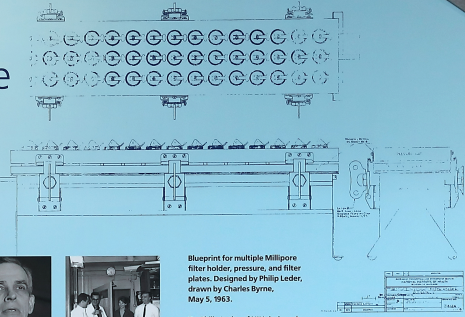
Dr. DeWitt Stetten, Jr., director of NIAMD, proudly called this period of collaboration the scientists' "finest hour."



In 1963 Dr. Philip Leder joined Nirenberg's research team to work on the base compositions of codons.

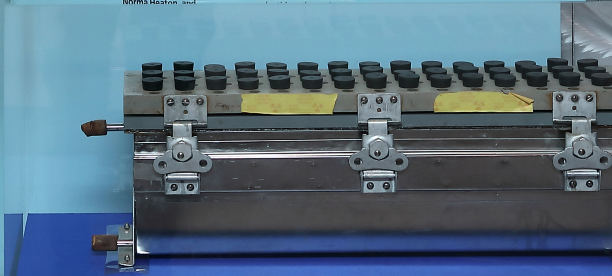


Nirenberg and NIH colleagues who helped decipher the code. (Left to right): Dr. W. French Anderson, lab technician



Blueprint for multiple Millipore filter holder, pressure, and filter plates. Designed by Philip Leder, drawn by Charles Byrne, May 5, 1963.

Dr. Philip Leder of NIH designed the multiple Millipore filtration instrument, nicknamed the "multi-plater." With this instrument, up to 45 samples could be filtered before the filters had to be changed. This instrument streamlined the process of determining the genetic code.



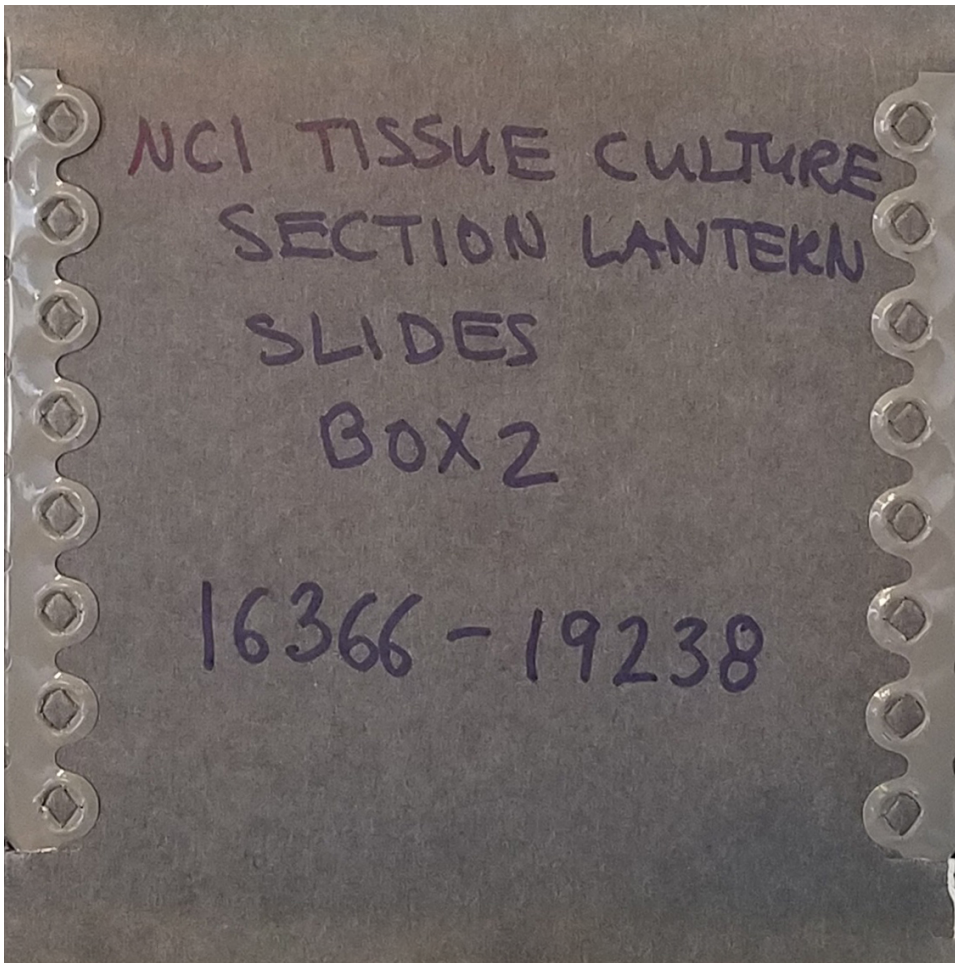
Multiple Millipore Filtration Instrument, ca. 1964.

Sethon Museum

Sometimes, discovering new knowledge requires new technologies and new methodologies. To speed up the processing of samples that would potentially reveal nucleotide codon assignments, Dr. Philip Leder, a geneticist at NIH, created this multiple Millipore filtration instrument that could simultaneously filter 45 samples.

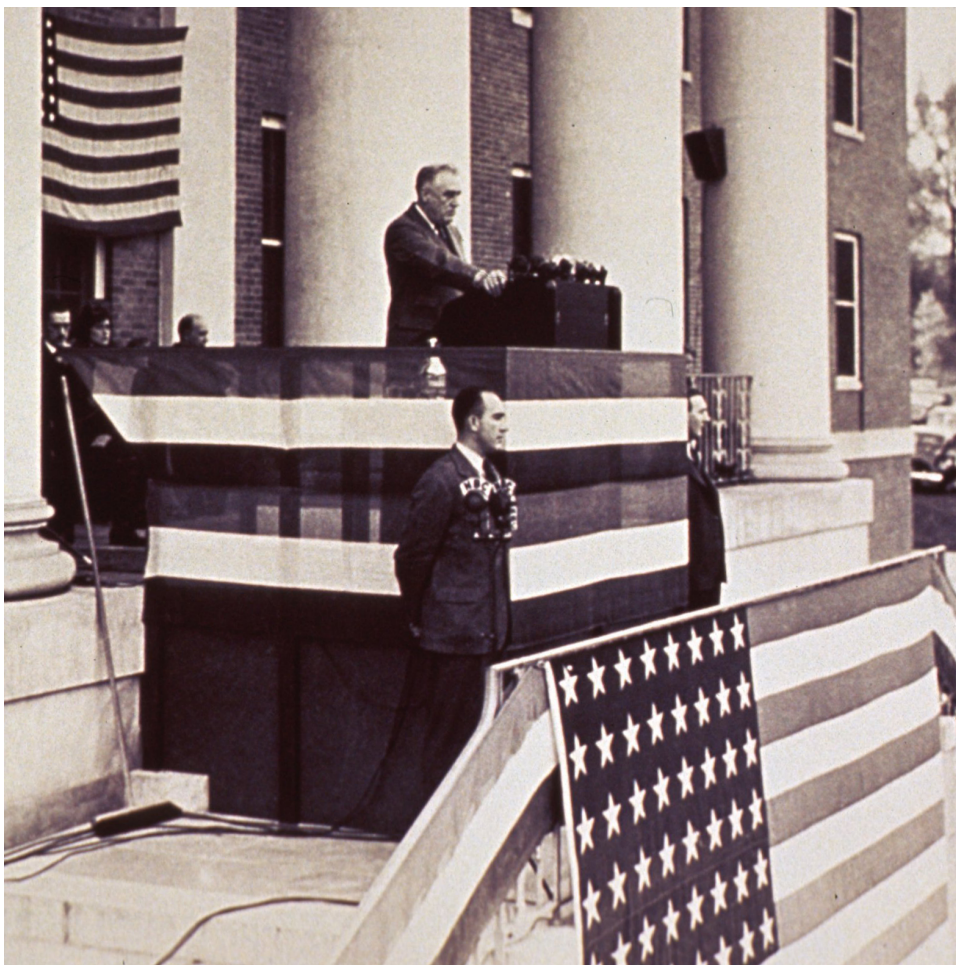
Exhibits

The DeWitt Stetten Jr. Museum of Medical Research, established in 1986, preserves and interprets the material culture of the scientific work of the NIH. In conjunction with the broader Office of NIH History, the Stetten Museum collects biomedical research instruments, photographs, videos, journals, oral histories, and objects related to the general history of the NIH, including architectural artifacts, artwork, and clothing.



Collections

The Office of NIH History and Stetten Museum holds many collections: objects, images, and documents, and books. We have over 3,100 objects and thousands of photographs related to NIH history. There are many ways to search our collections.



Archives

The Office of NIH History and Stetten Museum was established to increase historical understanding of the National Institutes of Health and biomedical science among NIH staff, scholars, and the general public. The Office serves as a source of information for NIH history by maintaining a subject and biographical ready-reference collection.



Canyon Creek Schoolhouse Laboratory 100th Anniversary

In September 1921, state and federal scientists rented a schoolhouse in Montana to set up a laboratory. They worked there only seven years, but what they did made history: created a vaccine for a highly fatal disease; added to our knowledge of diseases carried by ticks; and established the forerunner of the Rocky Mountain Laboratories.



Call for Stories: Behind the Mask

COVID-19 has impacted the NIH community in many ways—from researching and providing information about the disease, developing therapeutics and vaccines, caring for patients in the Clinical Center, and re-configuring how we perform our jobs. The Office of NIH History and Stetten Museum seeks reflections, documents, photographs, and objects about how those at NIH have experienced the COVID-19 pandemic.



Dr. Kim Pelis Named ONHM Director

Dr. Pelis has worked at the NIH for more than 15 years, primarily in the Office of the Director, where she was lead speech writer on the NIH Director's Presentations Team and an editor for the NIH Director's Blog. Kim joins the ONHM with experience in both academic and public history. She earned her Ph.D. in the history of medicine from Johns Hopkins University School of Medicine. Prior to coming to the NIH, Kim was an assistant professor of medical history at the Uniformed Services University, across the street from the NIH, from 1998 to 2005.



The Evolution of Minority Health Research

Please join us for the next NIH History Office lecture, "The Evolution of Minority Health Research" by Otis Webb Brawley, M.D., Johns Hopkins University, from noon to 1:00 p.m. ET on Thursday, February 24, 2022, at <https://videocast.nih.gov/watch=44756>.

Read more about this lecture: [The Evolution of Minority Health Research](#)



In Memoriam: [Barbara Faye Harkins, Archivist](#)

Photo by Hank Grasso

We're sad to announce the death of our long-time archivist, Barbara Faye Harkins. After retiring in March 2020, she was greatly missed by our patrons. Now she will be greatly missed by us.



Remembering Dan Lednicer, Volunteer Extraordinaire

Photo Courtesy of the Lednicer Family

We celebrate the life, work, and friendship of Daniel Lednicer, Ph.D., who joined our office as a volunteer in 2006 and actively contributed to our mission until his death last week at the age of 91. He is greatly missed.

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